

## Abstract Of The Disclosure

A computer-implemented speech recognition method and system for handling noise contained in a user input speech. The user input speech from a user contains environmental noise, user vocalized noise, and useful sounds. A domain acoustic noise model is selected from a plurality of candidate domain acoustic noise models that substantially matches the acoustic profile of the environmental noise in the user input speech. Each of the candidate domain acoustic noise models contains a noise acoustic profile specific to a pre-selected domain. An environmental noise language model is adjusted based upon the selected domain acoustic noise model and is used to detect the environmental noise within the user input speech. A vocalized noise model is adjusted based upon the selected domain acoustic noise model and is used to detect the vocalized noise within the user input speech. A language model is adjusted based upon the selected domain acoustic noise model and is used to detect the useful sounds within the user input speech. Speech recognition is performed upon the user input speech using the adjusted environmental noise language model, the adjusted vocalized noise model, and the adjusted language model.